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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,628	07/26/2004	Alexander P. Rigopulos	10724-7	4627

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STEPTOE & JOHNSON LLP  
1330 CONNECTICUT AVENUE, NW  
WASHINGTON, DC 20036

EXAMINER
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TORIMIRO, ADETOKUNBO OLUSEGUN

ART UNIT	PAPER NUMBER
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3709

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/30/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/710,628

Applicant(s)

RIGOPULOS ET AL.

Examiner

Adetokunbo O. Torimiro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 04/25/2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claim 1 is objected to because of the following informalities:

Claim 1, line 5: "a player" should be -- the player -- and "a game" should be -- the game --.

Claim 1, line 9: "a game character" should be -- the three-dimensional game character --.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 21-25, 27,28, 33-41, 46-52, 66-70, 72,73, and 78-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger et al (US 4,843,568) in view of Miyamoto et al (US 6,165,073).

Re claim 1: Krueger et al teaches a method for allowing a player of a video game to control a game character in a game world (see col.6, lines 17-24), the method comprising the steps of: acquiring video image data of a player of a game (see col.1, lines 8-9); analyzing the acquired video image data to identify the location / *salient* of a portion of the player's body (see col.2, lines 38-41 and col.7, lines 66-68)); and using the identified location of the portion of the player's body to control behavior of a game character (see col.8, lines 40-42).

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However, Krueger et al fails to teach the method for allowing a player of a video game to control a three-dimensional game character in a three-dimensional game world.

Miyamoto et al teaches the method for allowing a player of a video game to control a three-dimensional game character in a three-dimensional game world (see col.1, lines 13-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include allowing a player of a video game to control a three-dimensional game character in a three-dimensional game world, since playing a game in three-dimension makes the game more realistic and life-like thereby increasing the player's interest and enjoyment of the game.

Re claims 2-7: Krueger et al teaches the method further comprises identifying the location of the player's head, hands, feet, torso, legs, or arms / *features* (see col.8, lines 16-18 and col.26, lines 64-66).

Re claims 21-25: Krueger et al teaches the method further comprises identifying the location of the player's hands, feet, torso, legs, or arms / *features* (see col.8, lines 16-18 and col.26, lines 64-66).

Re claim 27: Krueger et al teaches the method comprising raising a game character's / *graphic creature* left hand when the player's / *user* left hand is raised (see col.8, lines 63-68 and col.9, lines 1-4).

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Re claim 28: Krueger et al teaches the method comprising raising a game character's / *graphic creature* right hand when the player's / *user* right hand is raised (see col.8, lines 63-68 and col.9, lines 1-4).

Re claims 33-41: Krueger et al teaches the method further comprises identifying the location of the player's feet, torso, legs, or arms / *features* (see col.8, lines 16-18 and col.26, lines 64-66).

Re claim 46: Krueger et al teaches a system for allowing a player of a video game to control a game character in a game world (see col.6, lines 17-24), the system comprising: an image acquisition subsystem acquiring video image data of a player of a game (see col.1, lines 8-9); an analysis engine identifying the location of a portion of the player's body (see col.2, lines 38-41 and col.7, lines 66-68); and a translation engine using the identified location of the portion of the player's body to control behavior of a game character (see col.8, lines 40-42).

However, Krueger et al fails to teach a system for allowing a player of a video game to control a three-dimensional game character in a three-dimensional game world.

Miyamoto et al teaches the system for allowing a player of a video game to control a three-dimensional game character in a three-dimensional game world (see col.1, lines 13-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include allowing a player of a video game to control a three-dimensional game character in a three-dimensional game world, since playing a game in three-dimension makes the

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game more realistic and life-like thereby increasing the player's interest and enjoyment of the game.

Re claims 47-52: Krueger et al teaches the system wherein said analysis engine identifies the location of the player's head, hands, feet, torso, legs, or arms / *features* (see col.8, lines 16-18 and col.26, lines 64-66).

Re claims 66-70: Krueger et al teaches the system wherein said analysis engine identifies the location of the player's hands, feet, torso, legs, or arms / *features* (see col.8, lines 16-18 and col.26, lines 64-66).

Re claim 72: Krueger et al teaches the system wherein said translation engine outputs signals indicative of raising a game character's / *graphic creature* left hand when the player's / *user* left hand is raised (see col.8, lines 63-68 and col.9, lines 1-4).

Re claim 73: Krueger et al teaches the system wherein said translation engine outputs signals indicative of raising a game character's / *graphic creature* right hand when the player's / *user* right hand is raised (see col.8, lines 63-68 and col.9, lines 1-4).

Re claims 78-86: Krueger et al teaches the system wherein said analysis engine identifies the location of the player's feet, torso, legs, or arms / *features* (see col.8, lines 16-18 and col.26, lines 64-66).

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4. Claims 8-20 and 53-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger et al (US 4,843,568) in view of Miyamoto et al (US 6,165,073) and further in view of Pelosi (US 6,424,410).

Re claims 8-20: Krueger et al teaches the method for allowing a player of a video game to control a game character in a game world (see col.6, lines 17-24), where the game character / *graphic creature* responds to the movement / *behavior* of the game player / *user* (see col.8, lines 63-67).

However, Krueger et al fails to teach the method comprising game character responding to the movement of the game player's head in a three-dimensional gaming environment.

Pelosi teaches the method comprising game character responding to the movement of the game player's head in a three-dimensional gaming environment (see col.17, lines 13-33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in a three-dimensional gaming environment, game characters responding to the various movement of the game player's head so as to allow another form of game control, better navigation of game characters, and increasing realistic effect of the game thereby increasing player's enjoyment and interest in the game.

Re claims 53-65: Krueger et al teaches the system for allowing a player of a video game to control a game character in a game world (see col.6, lines 17-24), where the game character / *graphic creature* responds to the movement / *behavior* of the game player / *user* (see col.8, lines 63-67).

However, Krueger et al fails to teach the system wherein translation engine outputs signals indicative of game character responding to the movement of the game player's head in a three-dimensional gaming environment.

Pelosi teaches the system wherein translation engine outputs signals indicative of game character responding to the movement of the game player's head in a three-dimensional gaming environment (see col.17, lines 13-33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in a three-dimensional gaming environment, game characters responding to the various movement of the game player's head so as to allow another form of game control, better navigation of game characters, and increasing realistic effect of the game thereby increasing player's enjoyment and interest in the game.

5. Claims 26, 29-32, 42-45, 71, 74-77, and 87-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger et al (US 4,843,568) in view of Miyamoto et al (US 6,165,073) and further in view of Norton et al (US 5,704,836).

Re claims 26 and 29-32: Krueger et al teaches the method for allowing a player of a video game to control a game character in a game world (see col.6, lines 17-24), where the game character / *graphic creature* responds to the movement / *behavior* of the game player / *user* (see col.8, lines 63-67).

However, Krueger et al fails to teach the method comprising game character responding to the movement of the game player's hand in a three-dimensional gaming environment.

Norton et al teaches the method comprising game character responding to the movement



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of the game player's (28) hand in a three-dimensional gaming environment (see col.9, lines 63-67 and col.11, lines 37-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in a three-dimensional gaming environment, game characters responding to the various movement of the game player's hand so as to allow another form of game control, better navigation of game characters, and increasing realistic effect of the game thereby increasing player's enjoyment and interest in the game.

Re claim 42: Krueger et al teaches the method for allowing a player of a video game to control a game character in a game world (see col.6, lines 17-24), where the game character / *graphic creature* responds to the movement / *behavior* of the game player / *user* (see col.8, lines 63-67).

However, Krueger et al fails to teach the method further comprising the step of analyzing the acquired video image data to determine a gesture made by the player.

Norton et al teaches the method further comprising the step of analyzing the acquired video image data to determine a gesture made by the player (28) (see col.9, lines 51-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in a three-dimensional gaming environment, the step of analyzing the acquired video image data to determine a gesture made by the player so as to allow interaction between player and game character. **It is apparent to examiner that the gesture made by the player has to be acquired and analyzed in order for a control of the game character by the game players movement.**

Re claims 43-45: Krueger et al teaches the method for allowing a player of a video game to control a game character in a game world (see col.6, lines 17-24), where the game character / *graphic creature* responds to the movement / *behavior* of the game player / *user* (see col.8, lines 63-67).

However, Krueger et al fails to teach the method further comprising the step of controlling the game character responsive to the determined gesture.

Norton et al teaches the method further comprising the step of controlling the game character responsive to the determined gesture (see col.9, lines 57-62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in a three-dimensional gaming environment, the step of controlling the game character responsive to the determined gesture so as to allow another form of game control, better navigation of game characters, and increasing realistic effect of the game thereby increasing player's enjoyment and interest in the game. **It is apparent to examiner that the game character be controlled in response to the gesture made by the player in order for a control of the game character by the game players movement.**

Re claims 71 and 74-77: Krueger et al teaches the system for allowing a player of a video game to control a game character in a game world (see col.6, lines 17-24), where the game character / *graphic creature* responds to the movement / *behavior* of the game player / *user* (see col.8, lines 63-67).

However, Krueger et al fails to teach the system wherein translation engine outputs

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signals indicative of game character responding to the movement of the game player's hand in a three-dimensional gaming environment.

Norton et al teaches the system wherein translation engine outputs signals indicative of game character responding to the movement of the game player's (28) hand in a three-dimensional gaming environment (see col.9, lines 63-67 and col.11, lines 37-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in a three-dimensional gaming environment, game characters responding to the various movement of the game player's hand so as to allow another form of game control, better navigation of game characters, and increasing realistic effect of the game thereby increasing player's enjoyment and interest in the game.

Re claim 87: Krueger et al teaches the system for allowing a player of a video game to control a game character in a game world (see col.6, lines 17-24), where the game character / *graphic creature* responds to the movement / *behavior* of the game player / *user* (see col.8, lines 63-67).

However, Krueger et al fails to teach the system wherein said analysis engine determines a gesture made by the player.

Norton et al teaches the system wherein said analysis engine determines a gesture made by the player (28) (see col.9, lines 51-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in a three-dimensional gaming environment, the system wherein said analysis engine determines a gesture made by the player so as to allow interaction between

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player and game character. **It is apparent to examiner that the gesture made by the player has to be acquired and analyzed in order for a control of the game character by the game players movement.**

Re claims 88-90: Krueger et al teaches the system for allowing a player of a video game to control a game character in a game world (see col.6, lines 17-24), where the game character / *graphic creature* responds to the movement / *behavior* of the game player / *user* (see col.8, lines 63-67).

However, Krueger et al fails to teach the system wherein said translation engine outputs signals indicative for controlling the game character responsive to the determined gesture.

Norton et al teaches the system wherein said translation engine outputs signals indicative for controlling the game character responsive to the determined gesture (see col.9, lines 57-62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in a three-dimensional gaming environment, the system wherein said translation engine outputs signals indicative for controlling the game character responsive to the determined gesture so as to allow another form of game control, better navigation of game characters, and increasing realistic effect of the game thereby increasing player's enjoyment and interest in the game. **It is apparent to examiner that the game character be controlled in response to the gesture made by the player in order for a control of the game character by the game players movement.**

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***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bleich et al discloses an apparatus for generating interactive video game playfield environments; Lantz et al discloses an apparatus for generating enhanced interactive video game playfield environments; Monroe et al teaches a method and apparatus for a virtual video game; Abecassis discloses a content-on-demand interactive video method and apparatus.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adetokunbo O. Torimiro whose telephone number is (571) 270-1345. The examiner can normally be reached on Mon-Fri (8am - 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1006.

AOT

  
**KIM NGUYEN**  
**PRIMARY EXAMINER**